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REMARKS

Claims 57-85 and 150 were pending in the application. No claims have been added. Claim 65 has been amended. Thus, upon entry of this amendment claims 57-85 and 150 are subject to continued examination. At this time, Applicants respectfully submit that the preponderance of the evidence weighs in favor of patentability. Accordingly, an action to that effect is respectfully requested.

Outstanding Art Rejections:

Claims 57-60, 62-67, 69-73 and 75-80 stand rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent 4,552,857 to Higgins (Higgins'857) in view of U.S. Patent 5,610,207 to De Simone et al. (De Simone '207). Claims 81-85 and 150 stand rejected under 35 U.S.C. 103(a) as being obvious over Higgins'857 in view of De Simone '207 and in further view of U.S. Patent 5,540,968 to Higgins (Higgins '968). Claims 61, 68 and 74 stand rejected under 35 U.S.C. 103(a) as being obvious over Higgins'857 in view of De Simone '207 and in further view of U.S. Patent 5,616,200 to Hamilton. Thus, all rejections are based in whole or in part on the combination of Higgins'857 in view of De Simone '207. Continued rejection on this basis is respectfully traversed and reconsideration is requested.

As best understood, the conclusion of obviousness reached by the Patent Office is based on the following proposition:

It would have been obvious to one of skill in the art to substitute a rebond foam layer as taught by for the foam layer of HIGGINS. Motivation to do so would be the advantages of said rebond foam, such as good cushioning properties at low cost (i.e. recycled material).

Applicants respectfully submit that this conclusion is inconsistent with the teachings of the cited art when considered in the context of the accepted wisdom held by those of skill in the art at the time the current application was filed. Thus, the conclusion appears to be supported on grounds of what one of skill in the art could have done

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rather than on what the skilled person would have been motivated to do.

As noted at MPEP §2142, to reach a proper determination under 35 U.S.C. 103, the Examiner must step back in time and into the shoes worn by a person of ordinary skill in the art when the invention was unknown and just before it was made. In view of all factual information, the Examiner must then make a determination of whether or not the claimed invention as a whole would have been obvious at that time to that person. Impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art. Certainly, Applicants recognize that any judgment of obviousness is in some sense necessarily a reconstruction based on hindsight reasoning. However, such reconstruction may take into account only knowledge that was within the level of ordinary skill in the art at the time the claimed invention was made. See, MPEP §2145(X)(A).

The ultimate determination of patentability must take into account the entire record. The decision is based on the legal standard of "a preponderance of evidence." With regard to rejections under 35 U.S.C. 103, the Examiner must provide evidence which as a whole shows that the legal determination of obviousness is more probable than not. See, MPEP §2142.

Based on the recognized controlling standards as outlined above, the ultimate issue in the present case can be stated as follows:

Does the evidence as a whole show that it is more probable than not that at the time the invention was made one of skill in the art would have found it obvious to substitute a rebond foam layer as taught by De Simons '207 for the foam layer in the tile of HIGGINS '857?

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Thus, the essential query centers on what a person of skill in the art having the benefit of the cited references but without the benefit of the present application would have considered obvious at the time the invention was made. If the preponderance of the evidence does not weigh in favor of finding that the claimed invention would have been obvious to such a person, then the rejection cannot be maintained.

In light of the fact that the essential inquiry is focused on what would or would not have been obvious to one of skill in the art at the time the invention was made, Applicants submit for consideration the declaration of Mr. Michael Norton. As noted in his declaration, Mr. Norton is a polyurethane chemist formerly employed by Dow Chemical Company and who was familiar with development efforts relating to the product described in the Higgins '857 patent as well as subsequent improvements to that product. Since October 2000, Mr. Norton has been a technical adviser for an organization focused on expanding the use of polyurethane rebond foam mainly as commercial broadloom carpet backing. Thus, Mr. Norton is personally familiar with the product described in the primary reference as well as with prevailing attitudes regarding rebond foam at the time the present invention was made.

Based on a review of the cited references and his personal experience derived from working with the cushioned carpet tile industry, Mr. Norton finds the patent office conclusion that it would have been obvious to one of skill in the art to substitute a rebond foam layer as taught by De Simone '207 for the foam layer of Higgins '857 to be in error. In support of his position, Mr. Norton notes that as a general design philosophy for carpet tile, moving to materials of lower tensile strength, lower elongation or lower density was considered undesirable due to the possibility of reduced dimensional stability or durability and/or unpredictable changes to the installation performance of the tile. He also notes that rebond foam is understood to generally have lower tensile strength, tear strength and elongation than corresponding virgin foam. As evidence of the real world impact of such philosophies, Mr. Norton notes that in an analogous development effort to substitute MDI polyurethane for the original TDI polyurethane

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used in the carpet tile described in Higgins '857, potential cushion materials that exhibited substantial reductions in physical or performance properties would have been dismissed as unacceptable substitutes. Mr. Norton also notes that in actual practice, despite an interest in reducing material costs for the tile disclosed in the Higgins '857 patent, the density was maintained at about 16 pounds per cubic foot due to concerns over cushion quality and the effect on dimensional stability, long term durability and installation performance. Thus, the Office Action's proposed substitution of the low density foam of De Simone '207 for the high density foam specifically advocated by the Higgins '857 patent would be inconsistent with actual historical design practices.

Since a reference must be considered for everything it teaches, Mr. Norton has also considered the data in De Simone '207 and the likely impact such data would have had on one of skill in the art. He concludes that the teachings of De Simone '207 would actually have been a disincentive to the modifications proposed by the Office Action since the data indicate undesirable reductions in tensile strength, tear strength, and elongation as well as an undesirable increase in compression set relative to corresponding virgin foams. Mr. Norton also notes that the Higgins '857 patent indicates that the tile described therein is intended to be suitable as a freelay carpet tile for use in commercial installations. The fact that the tile of the Higgins '857 patent was intended for such use would have weighed further against the proposed modification due to skepticism regarding the suitability of rebond foam for commercial installations and the importance of maintaining dimensional stability in freelay tile.

The significance of Mr. Norton's declaration is that he is clearly a person of skill in the art providing the PTO with a clear indication that the modification of the cited art proposed by the Office Action would not have been considered obvious by the skilled person at the time of the present invention. Moreover, his positions are supported by actual experience in working on improvements to the subject matter of the primary reference.

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Importantly, in the previous Office Action, the Examiner agreed that the earlier filed arguments and declaration of Richard L. Kilpatrick established the accepted wisdom in the art that rebond foam would not be suited for carpet tiles due to lack of uniformity in thickness and density that produces a reduced strength and durability. However, the Examiner went on to note that an assertion of unexpected results had not been clearly established and suggested that Applicants conduct a series of comparative performance tests of carpet tiles with virgin and rebond cushion layers. Applicants respectfully submit that testing to establish unexpected results is not required to support patentability in light of the overwhelming evidence weighing against the position of *prima facie* obviousness. In this regard, Applicants note that while an unexpected result may be evidence of nonobviousness it is not a requirement. On this point the Examiner is respectfully referred to the case of *American Hoist & Derrick Company v. Sowa & Sons, Inc.*, 220 USPQ 763, 771 (CAFC, 1984) which notes that a patentable invention may result even without the existence of a new and unexpected result and function.

The Examiner has already acknowledged that the earlier filed declarations establish the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. As noted at MPEP §2145, proceeding contrary to accepted wisdom is evidence of nonobviousness. In addition, Mr. Norton's declaration outlines numerous perceived disadvantages of rebond foam that would weigh against its use in the manner proposed by the Office Action.

In view of the fact that the carpet tile of the Higgins '857 patent is specifically stated to be suitable as a freelay commercial carpet tile, it is respectfully submitted that the evidence of record weighs particularly heavily against the conclusion that the modification proposed by the Office Action would be obvious. In this regard, Applicants note that the data in De Simone '207 actually weighs against the proposed modification since it would be considered to place dimensional stability at risk. Applicants further note that there is no indication in De Simone '207 that the rebond foam as described can be placed in a carpet tile. The design requirements for carpet tile are particularly rigorous due to concerns over dimensional stability and the like. Thus, it is respectfully submitted that the data in De Simone '207 showing reduced physical

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performance characteristics actually weigh against the proposed placement of rebond foam in a carpet tile.

If the evidence is properly considered in its entirety, Applicants respectfully submit that there can be no reasonable determination that the preponderance of such evidence weighs in favor of obviousness. Unless the preponderance of evidence weighs in favor of a conclusion of obviousness, the claims must be allowed. The evidence of record establishes the accepted wisdom in the art that rebond foam would not be suited for carpet tiles. The evidence also shows that one of skill in the art would have considered the proposed modification of the carpet tile in Higgins '857 to be problematic since the tile being modified is intended to be suitable as a freelay commercial tile. The evidence further establishes that the data in the cited '207 reference would have actually provided a disincentive to the proposed modification. In light of such evidence, Applicants respectfully submit that the conclusion of obviousness can be maintained only through the use of impermissible hindsight while ignoring the actual perceptions and attitudes of those of skill in the art at the time the invention was made. Such a result would be in contradiction to the controlling standards of patentability.

Finally, Applicants wish to note that even if the modification proposed by the Office Action was made, the resultant structure would not satisfy the limitations of the claims absent further structural modification to the tile of the primary reference. In particular, Higgins '857 teaches two layers of non-adhesive material in the bridging composite between the foam layer and the primary base. Thus, in order to reach the invention as claimed, the cited Higgins '857 patent would not only have to incorporate a rebond foam cushion but would also have to eliminate one of the non-adhesive layers. Applicants respectfully submit that such a required redesign weighs even further against the proposed modification and in favor of patentability.

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Extension of Time/Authorization to Charge Deposit Account:

To any extent required, a request for an extension of time is hereby made. While no fee is believed to be owed, authorization is provided to deduct any additional fee as may be required for acceptance of this paper from Deposit Account No. 04-0500.

February 7, 2005

Daniel R. Alexander

Respectfully salimitted,

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CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to The United States Patent and Trademark Office at 703-872-9306 on February 7, 2005.

Daniel X. Alexander Attorney for Applicant(s)